

CONVAIR

A DIVISION OF GENERAL DYNAMICS CORPORATION



SAN DIEGO 12, CALIFORNIA
TELEPHONE: CYPRESS 6-6611

18 February 1957

Dept. of Public Works
1970 B Street
San Diego 2, California

Attention: Mr. Jack H. Kunns, Chemical Engineer

Subject: Report on Convair Industrial Waste Disposal

Dear Sir:

In a meeting, held recently in the office of the undersigned, a request was made for Convair to supply certain data pertaining to the existing volume of waste solution. If possible, they were to project this volume into the future as far as could be forecasted on a reasonable basis.

Attached are three (3) copies of our report complying with the above outlined request.

If this office can be of any further assistance in this matter, please feel free to call at any time.

Yours truly,

CONVAIR
A Division of General Dynamics Corporation
(San Diego)


V. Sharp
Asst. Chief Plant Engineer

VS:ds

cc: H. A. Smith
J. Freeman

REPORT ON INDUSTRIAL WASTE DISPOSAL

Process solutions employed at Plants 1 and 2, Convair, San Diego include caustic soda; chromic acids and dichromates; hydrofluoric, nitric, sulphuric, and hydrochloric acids, and cadmium cyanides.

These solutions become contaminated and must be replaced with fresh solution.

Other industrial wastes in liquid form include contaminated oils from the machine shop, spent and rancid coolants from production milling operations, and paint sludges and dirty lacquer thinners from paint shops. These materials are not saleable because they are closely associated with water and sludge. Solid wastes include magnesium turnings and cake cyanides.

In 1956 Convair disposed of 20,000 gallons of contaminated process solutions and 121,000 gallons of the other liquid wastes.

Cyanide wastes are encased in concrete and dumped at sea under State supervision.

In the past magnesium wastes have been buried. Five thousand pounds were disposed of in this manner in 1956.

The present method of disposal of all other solutions is hauling and dumping into the sanitary fill in the Mission Bay area. Solutions bulking over 500 gallons and which can be hauled in a steel tank are hauled by a contractor. Cost for hauling is \$56.00 for a minimum 2000 gallon load. Solutions which attack steel are hauled in a company owned "sludge bucket". The capacity of this bucket must be limited to 250 gallons to avoid spillage enroute. Estimated company cost of disposal in this manner is \$6.00 a trip. Total cost for this short haul in 1956, excluding shop labor, was \$4000.00.

Although most of the acid and alkaline solutions are hauled untreated, one tank full was neutralized before hauling. This treatment took six hours and 800 pounds of caustic for 2500 gallons of solution. Estimated cost was \$154.00.

It is estimated that the amount of the foregoing wastes will be 200,000 gallons per year for the next five years. Of this 149,000 gallons will be paint and oily wastes, and 51,000 gallons of the process solutions.

The following is a breakdown of the process solutions:

Solution	pH Range	Quantity Gallons	% of Total in Class
Alkali (caustic)	11 - 13	17,100	100
Acids:	All	33,900	-
Class I	1.0	14,500	-
Chromic		5,800	40
Hydrofluoric		3,480	24
Nitric		3,335	23
Sulphuric		1,015	7
Hydrochloric		870	6

7 February 1977

Report on Industrial Waste Disposal - Continued

Solution	pH Range	Quantity Gallons	% of Total in Class
<u>Class II</u>	1.0 thru 2.0	16,900	—
Chromic		16,900	100
<u>Class III</u>	4.2	2,500	—
Sodium Dichromate		2,500	100

Submitted by: *E. W. Winchester*
E. W. Winchester
#25-4 Plant Engineering Department

Approved by: *R. E. Dennington*
R. E. Dennington, Plant Engineer (Design)
#25-4 Plant Engineering Department

Approved by: *W. H. Odle*
W. H. Odle, Sr. Plant Engineer (Design)
#25-0 Plant Engineering Department

EWW/rh

Approved by: *Joe Freedman*
Joe Freedman,
#14-5 Material Reclamation Department

Ref: 072-0748-4PM
February 20, 1957

Department of Public Works
Sewerage Division
1970 B Street
San Diego 2, California

Attention: Mr. J. H. Kuhns

Gentlemen:

In support of your efforts to have designated an industrial waste disposal area, the following data is submitted.

Our present annual industrial waste disposal is comprised of:

<u>ANNUAL WASTE</u>		<u>DISPOSAL FREQUENCY</u>	
<u>Gallons</u>	<u>Material</u>	<u>Increment - gal.</u>	<u>Frequency</u>
8,000	Hydrochloric - sulfuric	2,000	3 months
40,000	20% Nitric - 1% Hydrofluoric	2,000	2.5 weeks
12,000	Chromic - Nitric	2,000	2 months
4,000	Caustic	2,000	6 months
2,000	5% Cyanide solution 10% Cyanide salts	1,000	6 months

It is believed that over a period of the next five years, this present rate will be doubled.

FEB 25 1957

Our present method of waste disposal consists of engaging the services of a commercial pumping company who in turn disposes of these wastes in the Los Angeles area. At our present rate of discharge, the cost of these services is \$2600 per year.

Very truly yours,

ROHR AIRCRAFT CORPORATION

W. H. Wynne
Supervisor, Laboratory

WHW:bja

cc: D. A. O'Leary ✓
R. F. Bott

S. D. Industrial Waste

April 15, 1957

PROGRESS REPORT
ON
THE FEASIBILITY OF ESTABLISHING AN
INDUSTRIAL WASTE DUMP IN THE SAN DIEGO AREA

INTRODUCTION

The disposal of waste materials such as acids, alkaline compounds, toxic substances, and waste paint oils and thinners has long been a problem faced by many governmental agencies.

The discharge of these wastes into diluting waters has, in general, been unsatisfactory, resulting in the pollution of bays, rivers, and underground water supplies. Waste treatment and neutralization by industry prior to discharge has been quite successful in many cases.

In the San Diego Metropolitan Area at the present time, wastes of this type are being discharged into sanitary fills, at sea, into the sewerage system, and onto the ground in areas not approved for this purpose. Hauling in privately operated tank trucks is utilized to a considerable extent by the aircraft companies. Some of these loads go to sanitary fills in San Diego. Some go as far as the White's Point Outfall in Los Angeles.

The discharge of these materials into sanitary fills has not been satisfactory because of the hazards involved in handling large volumes of acids and toxic compounds. Also, the fire hazard created by the presence of large volumes of combustible oils and waste paint thinners makes this type of disposal undesirable.

Disposal at sea and long tank trucks hauls are expensive. Discharging these materials onto the ground in unauthorized locations endangers underground water supplies and creates a surface hazard if extensive safety precautions are not taken.

Although limited concentrations of toxic compounds may be safely taken into the City sewerage system, the discharge of large volumes could result in damage to sewer lines and serious interference with treatment plant processes. Further, large quantities of the toxic elements present in the raw sewage are still present in the plant effluent discharged into San Diego Bay.

Long range planning concerning a method of disposal, satisfactory to industrial waste dischargers and governmental agencies concerned with protection of the public interests is needed to realistically and completely meet the problem of disposing of ever increasing volumes of industrial wastes.

An Industrial Waste Disposal Committee formed by the San Diego Chamber of Commerce and consisting of representatives from San Diego industries and governmental agencies, has studied this problem. An Industrial Waste Ordinance and policy for the enforcement of the Ordinance were formulated and recommended to the City Manager for adoption by the City of San Diego. These were adopted by the City Council on ^{Feb 5} ~~March~~ 5, and ¹² March 8, 1957, respectively, and constitute a framework within which effective and realistic control of industrial waste can be maintained. The committee further discussed the possibility of establishing a dump area into which toxic wastes might be discharged. By unanimous action

the committee recommended that the City take the initiative in the establishment of such a dump. Subsequently, the Assistant City Manager asked the Sewerage Division of the Department of Public Works to investigate the feasibility of establishing an industrial waste dump in the San Diego area.

EXISTING INDUSTRIAL WASTE DUMPS

On January 22, 1957, an inspection trip was made to Riverside, California, to observe an industrial waste dump located in this area and to obtain information which might be useful in the establishing of a similar installation in the vicinity of San Diego.

Inspection of the dump and conversation with Mr. L. E. Hatt, representative of the J. B. Stringfellow Company, who was extremely cooperative and helpful, developed some very interesting information.

The dump is operated by the J. B. Stringfellow Company, who also operate a quarry adjacent to the dump site. Operation of the site began last September. Investment to date is approximately \$14,000.00. This includes the digging of a flood control channel along one side of the dump area to control runoff waters from rainfall, the construction of approximately 250 feet of dike to close the naturally formed basin in which the disposal area is located, and earth moving operations within the disposal area. Some 15 to 20 acres are to be utilized as actual dumping sites. Small basins are formed by bulldozing to receive individual discharges.

Four companies presently have disposal contracts at \$.015 per gallon. It is estimated that the total yearly volume handled will be 220,000 gallons of chromic acid, phenol, and paint lime. Mr. Hutt stated that he now believes the rate of \$.015 per gallon to be too low.

The area in which the dump is located, a few miles East of Riverside, is underlain by impermeable rock, which substantially reduces water pollution problems. There is a well located downhill from the disposal site approximately 1-1/2 miles. The water in this well is checked periodically for evidence of pollution.

Mr. Hutt also stated that the companies' liability insurance rates had increased seven times and that they were currently threatened with law suits by various parties on the basis of possible water pollution.

The area is in a valley surrounded by mountainous terrain. Entry can be made only through a gate near the company office. Also danger signs are posted throughout the disposal area. No records are currently maintained as to the exact location of materials dumped in the area.

Attached to this report is a copy of an inter-departmental communication from the Division of Water Resources to the Regional Water Pollution Control Board, No. 8, dated June 2, 1953, relative to the Riverside dump.

Other privately operated dumps in the vicinity of Seal Beach and Huntington Beach have been operating for several years. These will be inspected during the course of this investigation.

INVESTIGATION

In making an estimate of the quantities of various types of wastes in the San Diego area which would be discharged into an industrial waste dump, various industries were contacted regarding both their interest in the establishment of such a dump and the quantities of waste they would have for discharge. All of the concerns contacted showed considerable interest in the project and were very cooperative in furnishing data on waste volumes.

At the present time the aircraft companies in the area would be the largest users of an industrial waste dump. Attached to this report are copies of letters from Convair, Ryan, and Rohr aircraft companies showing their types and volumes of wastes. It should be noted that this information is of a confidential nature and was submitted with the understanding that it be treated accordingly.

This information shows that approximately 400,000 gallons of waste per year can be expected from these three companies in the near future. These wastes consist of acid and toxic process solutions as well as paint and oily wastes.

Similar information obtained from plating companies in this area indicates that their combined waste process solutions would probably not exceed 5,000 gallons per year at the present time.

Dry cleaning establishments have wastes that consist of a filter ^{Powder} ~~paper~~ (diatomaceous earth) saturated with combustible cleaning solvents. This material would go into an industrial waste dump should one be established.

Information as to volumes of this type of waste was difficult to obtain because of its relation to the volume of business transacted. However, a very rough estimate of 500 cubic yards per year, weighing approximately 300 to 400 tons, might be made. In ten years this might cover an area of one acre, three feet deep.

Although much of the acid and toxic process solutions might be taken into the sewerage system on a controlled basis without damage, there remains a substantial quantity of combustible wastes to be disposed of in some manner. Most of this material is now going into the sanitary fills. Some of it is going into the sewerage system. In both cases a hazardous condition is created.

Hauling contractors who are currently transporting most of the above mentioned process solutions have indicated considerable interest in the establishment of an industrial waste dump. They have indicated also, that they would be interested in obtaining the land and operating such a dump.

Investigation has shown that there is a substantial volume of wastes which would go into an industrial waste dump. In considering the volumes involved for future planning, it would seem that a figure of 1,000,000 gallons per year would be reasonable. With an evaporation rate of 5 feet per year, this volume could be disposed of on an area of approximately one half an acre. An estimate of the area needed for 50 years would be roughly 10 to 25 acres. This figure may be modified as additional information is obtained.

The State Division of Water Resources classify dump sites into three categories. A dump, such as the one under investigation, would be a Class I dump, which is defined as, "Dump sites located on rocks through which no appreciable seepage to usable waters can occur, or underlain by isolated bodies of unusable ground water, and which are protected from surface runoff and where surface drainage can be restricted to the site or discharged safely."

In addition to the above requirements, it would also seem necessary that the dump be in an isolated location, fenced, and with adequate access roads.

In considering likely locations for an industrial waste dump, an Areal Geology Map was used and eleven possible locations were selected. These sites were inspected and observed with the above requirements in mind. The advantages and disadvantages of each location were summarized, as shown on Chart I.

It would seem that the most suitable dump locations would be Fort Rosecrans, Border Field, Black Mountain, or Del Mar Mesa. These are general areas only. Exact location will be made after soil sampling and testing. The Fort Rosecrans and Border Field areas are considerably more desirable, particularly from the standpoint of the minimum possible water pollution. There are undoubtedly other possible sites situated over saline water at greater distances from the Civic Center than those named.

Prior to the selection of one site and the actual establishment of a dump, it would be necessary to have the site classified as Class I by the Division of Water Resources. This requires core sampling and chemical analyses. In some cases, this work is quite extensive. Time and money would be saved if any of the above four sites could be eliminated from the standpoint of availability.

CONCLUSIONS

Investigation to date would seem to justify the following conclusions:

1. There is being created in the San Diego metropolitan area a substantial volume of waste material which is undesirable to have in the sewerage system or sanitary fills because of hazardous conditions created as a result of either toxicity or combustible properties.
2. The establishment of an industrial waste dump would appear to be an excellent long term solution to the problem of industrial waste disposal in the San Diego area. It is believed that this dump could and should be operated at no cost to the City by charging a dumping fee.
3. Industries in this area with waste disposal problems are very interested in the establishment of an industrial waste dump.
4. There are at least four possible sites in this area which might be classified as Class I dumps.

RECOMMENDATIONS

It is recommended that:

1. Further investigation be made into the establishment of an industrial waste dump in the San Diego metropolitan area.
2. The Property Department determine the availability of the four most likely dump locations mentioned earlier in this report, before any money is expended on soil sampling and testing.

ACKNOWLEDGEMENT

The assistance of Mr. Dennis C'Leary, Executive Officer of the Regional Water Pollution Control Board, No. 9, Mr. R. F. Botts, County Public Health Engineer, Mr. Richard L. Eriann, Assistant Civil Engineer, Sewerage Division, Department of Public Works, and Mr. Robert Clausen, Associate Hydraulic Engineer, State Department of Water Resources, in inspecting and observing possible sites as well as evaluating these sites is hereby gratefully acknowledged.

CHART I

EVALUATION OF INDUSTRIAL WASTE DUMP SITES

Location	Category Water Pollution	Examine	Advantages	Disadvantages	Rating
Mission Bay	Class I	Short haul 4-1/2 miles from Civic Center	No flooding - Already dump - No danger to drinking water - Easily developed	Future recreational area - Wild life refuge - Future airport - Future planting - Not isolated - Soon to be abandoned	Extremely Doubtful
Coronado	Class I	7 miles via ferry from Civic Center 17 mile road from Civic Center	Closeness - Already dump - No danger to drinking water - Easily developed	Popular bathing beach near - Pollution possi- ble - Wild life nearby - Readily accessible to public	Doubtful
Border Field	Not classi- fied. Probably Class I	16 miles from Civic Center	Closeness - Isolated - Security Guard - No public use of beach at present - No danger to drinking water - Little danger of flooding - Damage need only be tem- porary - Easily developed	Property probably not available for sale - Wells inland - What is effect of sea water intrusion - Wild life on beach - Question of future use, airport, yacht harbor	Possible
Otay Mt. West side	Unclassified- doubtful if Class I	10 to 20 miles from Civic Center	Closeness - Isolated	Drains down on agricul- tural land - Danger to water table below - Difficulty of develop- ment - Flood control required - Long access road needed	Doubtful
Mission Gorge Pletcher Hills area	Unclassified	6 to 7 miles from Civic Center	Very close - Sites easily developed - Now accessible	Seepage could harm existing water supplies in San Diego River and Lake Murray - Not iso- lated - Future use for subdivision	Doubtful

75.16.2000

February 24, 1958

City Manager

Superintendent, Sewerage Division
via Acting Director of Public Works

Establishment of an Industrial Waste Dump Site

As requested, we have carefully investigated the feasibility of establishing an Industrial Waste Dump Site for disposal of certain liquid and solid industrial wastes emanating from industries in the metropolitan area.

As previously reported in our progress report of December 4, 1957, twelve possible sites were investigated within a 20 mile radius of Civic Center. The two most favorable sites on Kearny Mesa were submitted to the Water Pollution Control Board for classification by the State Department of Water Resources.

The two tentatively acceptable sites which are identified as "A" & "B" on the enclosed vicinity map have been recommended as Class I Sites (suitable for Industrial Waste Dumping) with certain qualifications by the Water Resources Department in their report, a copy of which is attached. These sites will most likely be acceptable to the Water Pollution Control Board should the City wish to establish a dump provided that suitable test wells are drilled and monitored. Both sites would be satisfactory for an Industrial Waste Dump Area. Site "A" is on City owned property. Site "B" is more isolated, has longer haul and the access road passes through the plant area of the Sim J. Harris Company. Since both sites are within the Navy's proposed 12,000 ft. radius, an agreement with the Navy Department may have to be negotiated. Application will also have to be made to the Water Pollution Control Board for discharge requirements at the appropriate time.

The attached plan shows the required initial area necessary for the dump site which would be suitable for either site. An area of at least 25 acres should be reserved for future expansion and a surfaced access road should be provided.

All material received for disposal at the dump should be charged for at a rate which is sufficient to offset the annual operating and maintenance costs. It is estimated that a charge of approximately 2¢ per gallon of waste would be required with a minimum charge of \$10.00 for any single discharge.

A proposed plan of operation and estimate of quantities to be received for industrial waste dumping are also attached.

It is recommended that steps be taken to establish an Industrial Waste Dump site as outlined at Sites "A" or "B" since it is believed that either of these sites would fulfill the requirements of the Water Pollution Control Board. However, there is a very remote possibility

February 24, 1958

that ground water contamination may require the abandonment of any selected site in later years. Site "B" is the preferable location due to its isolation provided the necessary lands can be acquired for a reasonable figure.

Eric V. Quartly

EVQ/lb

Attachments - 6

PLAN OF OPERATION
INDUSTRIAL WASTE DUMP

Persons or firms desiring to dispose of waste materials having characteristics that exceed standards for discharging into the city's sewerage system, would be required to furnish information as to the type of material involved and a certified weight covering each load. Prior to discharge a qualified city employee would obtain a sample of the material and verify the type as well as determine its specific gravity. Using the certified weight and the Specific Gravity determination the number of gallons to be discharged would be determined. Before being allowed to dispose of his material, the discharger would be required to sign a statement covering the type and quantity of wastes discharged. This would be the basis of computing disposal charges. Billing would be initiated by the Sewerage Division and accomplished in a similar manner as is currently done with other agencies.

In the interests of safe operation, a complete record of discharges including type of material, quantity and exact location of discharge would be maintained by this Division. In order to prevent dangerous chemical reaction between discharged materials, only one type of chemical would be allowed in any given receiving pit.

In the event that other than normal familiar chemicals are involved, laboratory tests would be performed prior to discharge to determine chemical effects on other materials including the soil.

Samples would be taken periodically from the test wells and from the nearest water wells and analyzed for evidence of pollution from discharged waste materials.

ESTIMATE OF ANNUAL QUANTITIES OF WASTE MATERIALS

	Paint & Oil Wastes Gal./Yr.	Chronic Acid Gal./Yr.	Hydro- Fluoric Acid Gal./Yr.	Nitric Acid Gal./Yr.	Sulphuric Acid Gal./Yr.	Hydro- Chloric Acid Gal./Yr.	Di- Chromate Gal./Yr.	Cyanide	Total
Astronautics	150,000	24,000	4,000	4,000	,000	1,000	3,000		187,000
Convair	150,000	24,000	4,000	4,000	1,000	1,000	3,000		187,000
Ryan	10,000	20,000	80,000*	16,000	11,000	18,000		1,000	156,000
Rohr	200,000	12,000	40,000*		8,000**			2,000	262,000
TOTAL	510,000	80,000	152,000		41,000		6,000	3,000	792,000

* Mixture of Hydro-Fluoric Acid and Nitric Acid

** Mixture of Sulphuric Acid and Hydro-Chloric Acid

Solid Wastes -

Magnesium Shavings - 60 yd³/yr.

Dry Cleaning "Muck" - 200-500 yd³/yr. (very uncertain)

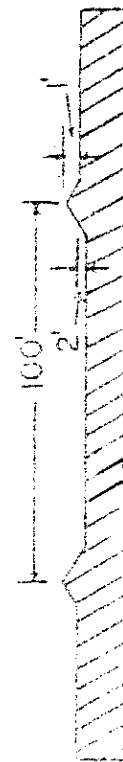
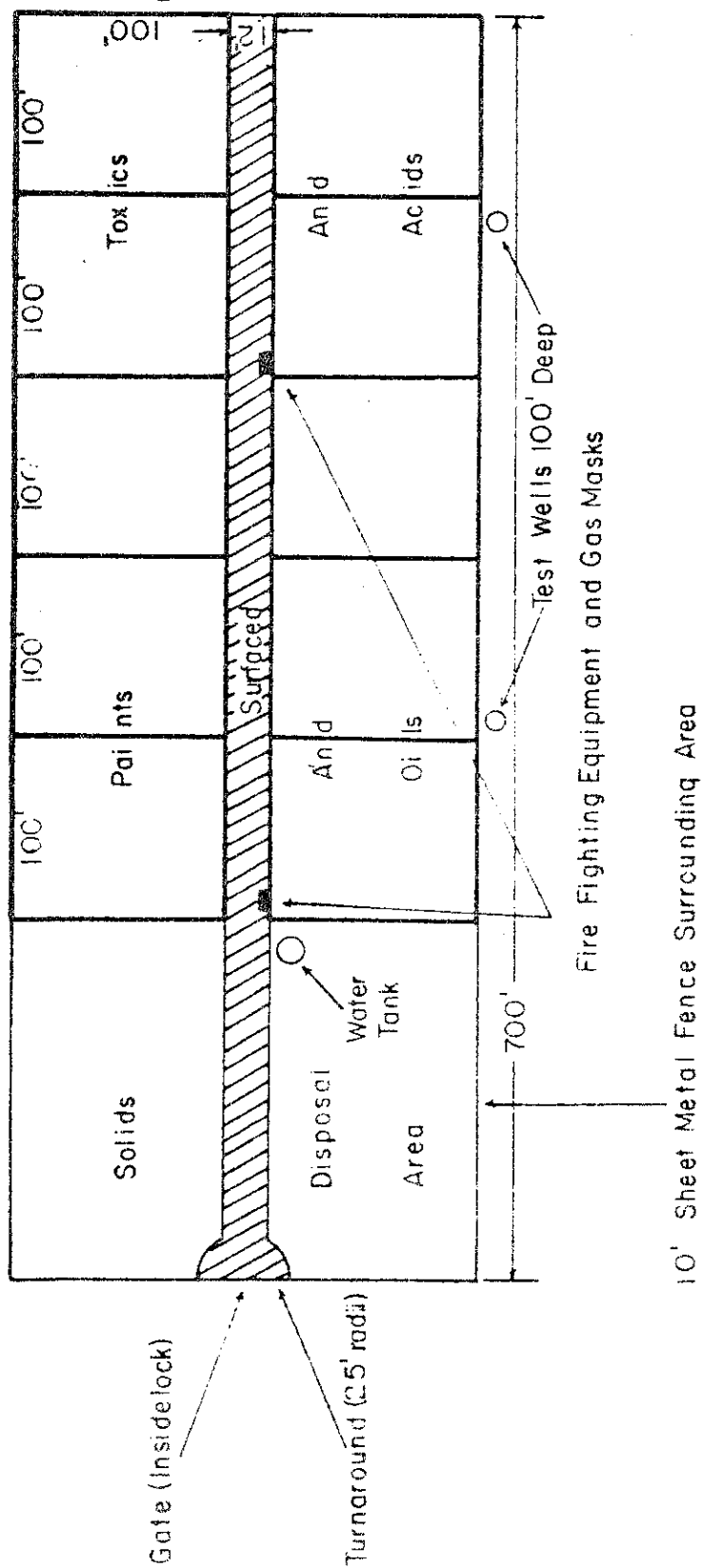
CONSTRUCTION AND ANNUAL COST ESTIMATES

INDUSTRIAL WASTE DUMP

	Site "A"		Site "B"		Amortized	
	Initial Cost	Annual Cost	Initial Cost	Annual Cost	Site "A"	Site "B"
1. Fence	9000	900	9000	900	10 yrs.	10 yrs.
2. Earthwork	4000	200	4000	200	20 "	20 "
3. Road Construction	1400	70	2800	140	20 "	20 "
4. 2 Test Wells	5600	280	5600	280	20 "	20 "
5. Gas Masks	700	140	700	140	5 "	5 "
6. Fire Fighting Equipment	600	120	600	120	5 "	5 "
7. Water Tower & Tanks	200	40	200	40	5 "	5 "
8. Insurance		1000		1000		
9. Salaries		<u>5000</u>		<u>5000</u>		
Total	21500	7750	22900	7820		

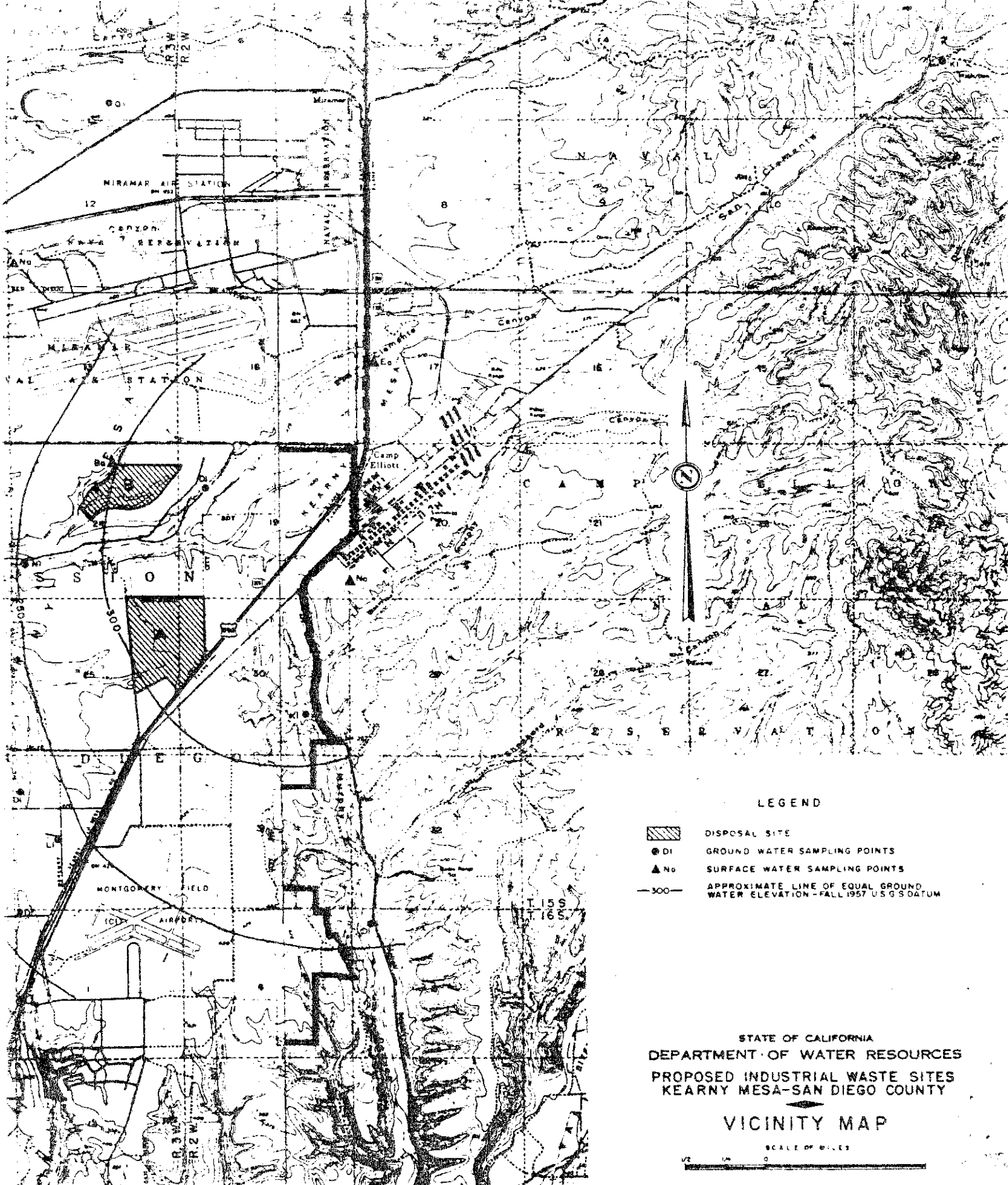
Foot Notes:

- Initially ten foot high, corrugated sheet metal, approx. 824 ft.
- Excavation of 10 pits - 100' x 100' x 2'.
- Site "A" - 1200 ft. Site "B" - 2400 ft. Surfaced Road - Plant Mix.
- 30° Angular Wells 100' to 200' deep for sampling and testing.
- Two Mine Safety Appliance Breathing Air Packs.
- One wheeled - 40 gal. - foam type fire extinguisher; one 2-1/2 gal. foam type fire extinguisher; two dry chemical - 20 lbs. - fire extinguishers.
- Safety shower water for personnel.
- Insurance - Fire and Public Liability.
- Salaries - Operational duties.
- The above estimates do not include cost of land due to possibility of leasing the desired site and also because one site is now City owned. After final site selection annual costs can be more accurately determined.



Cross Section of Pile

DEPARTMENT OF THE ARMY		
INDUSTRIAL	WASTE	AREA
DISPOSAL		
DRAWN: A. W. DATE: 2/3/58 CHECKED: J. P. DATE: 2-3-58 FILE NO: 15/16, 17, 18		



1 DIEGO

INDUSTRIAL WASTE DISPOSAL REPORT
Rohr Aircraft Corporation

RECORD OF INDUSTRIAL WASTE HAULED ON 11-6 19 68 DATE

NAME OF PRODUCER ROHR AIRCRAFT CORPORATION
PRINT

PRODUCERS BUSINESS ADDRESS FOOT OF "H" ST.
NUMBER STREET

CHULA VISTA CITY ZONE CALIFORNIA STATE

NAME OF HAULER OMAR RENDERING COMPANY Mr. O'DONNELL
PRINT

HAULERS BUSINESS ADDRESS 4826 OTAY VALLEY RD.
NUMBER STREET

CHULA VISTA CITY ZONE CALIFORNIA STATE

NAME OF DISPOSAL FACILITY MISSION BAY SANITARY LANDFILL CITY OF SAN DIEGO
PRINT

DISPOSAL SITE ADDRESS MISSION BAY, SAN DIEGO, CALIFORNIA

CHECK TYPE OF WASTE MATERIAL : ☐ NITRATE ACID ☒ NITRIC ACID ☐ HYDROFLUORIC ACID

☐ ALTREX CLEANER

☐ OAKITE

☐ HYDROCHLORIC ACID
☐ SULPHURIC ACID

☐ CHROMIC ACID
☐ NITRIC ACID

☐ HYDROCHLORIC ACID
☐ OTHER, DESCRIBE _____

ORIGIN OF WASTE & LOCATION _____

QUANTITY BBL. 2400.90 GALLONS

I CERTIFY THAT THE ABOVE DESCRIBED WASTE WAS DELIVERED TO THE HAULER NAMED BELOW FOR LEGAL DISPOSAL AT THE DISPOSAL SITE INDICATED.

D. J. Henderson
SIGNATURE OF PRODUCER OR AUTHORIZED AGENT

I CERTIFY THAT THE HAULER NAMED BELOW DELIVERED THE ABOVE DESCRIBED LIQUID WASTE TO THE DISPOSAL FACILITY OPERATED UNDER MY CONTROL IN ACCORDANCE WITH THE CONDITIONS OF AN INDUSTRIAL WASTE PERMIT.

HOUR _____

I CERTIFY THAT THE ABOVE DESCRIBED WASTE WAS HAULED BY ME TO THE DISPOSAL FACILITY NAME ABOVE AND WAS ACCEPTED FOR DISPOSAL AT THIS SITE.

J. B. Wooding
SIGNATURE OF WASTE DISPOSAL FACILITY OPERATOR

BUSINESS LICENSE NO. _____

W. J. B. Lammell
SIGNATURE OF HAULER OR AUTHORIZED AGENT

July 17, 1958

Director of Public Works

Superintendent Sanitation Division

Report on additional Fill Areas in Mission Bay. (Fairchild Maps C-18 and C-19)

1. As a result of a discussion with Mr. Ed. Gabrielson, City Engineer, on June 30th, attended by Messrs. Burton and Fish of the Division of Sanitation, it was indicated the Mission Fill operation could only last from 6 months to one year due to dredging plans.

a. Alternate areas in the vicinity were suggested as possible fill locations.

b. Subsequent discussions with Mr. Eric Quartly indicated a report was desirable.

2. This report is preliminary in nature and in the event locations noted are approved will require additional development.

3. The basis of estimates are:

a. 1. An input of \$10,000 c.y. per annum, compacted, from all sources.

2. An average depth of deposit of 10', and cover on final lift of 3'.

3. Operation would be out and fill with dragline and doker.

4. Fill operates 70 hours a week.

b. Other factors requiring further consideration:

1. Vehicles at fill site; 900 per day, 90 per hour.

2. Equipment shed with power and lights for maintenance of equipment.

3. Fencing

4. Access roads

5. Disposal of industrial waste acids, estimated as 792,000 gallons per year, all types.

6. A comprehensive check on ownership and location of utilities.

7. Drainage.

4. Areas under consideration on maps are marked A - B - C - D.

A - Area A is estimated as 9 acres and an expectancy of 6 months operation. A final grade would need to be established which would consider excess dirt, approximately 60% of excavated, or hauling away of excess. Area is reduced due to location of right of way.

B - Area B estimated as 39 acres, an expectancy of 2 years and 3 months, area is north of sewer line and would require the same final analysis as Area A.

C - Area C is in the main privately owned and is north of Point Loma Blvd., estimated as 14 acres and an expectancy of 10 months. Provision for drainage could be on west side of fill as indicated on map.

C O P Y

Report on Additional Fill Areas - Page 2

D - Area D is all privately owned and is estimated as 17 acres and an expectancy of 1 year. Provision for drainage could be on west side as shown on map. Cursory examination indicates a maximum flow of approximately 75 c.f.s. in drainage way.

Leon R. Burton

LRB:mr



4826 OTAY VALLEY ROAD

POST OFFICE BOX 1236

CHULA VISTA, CALIFORNIA

GARFIELD 2-5311

January 12th, 1959

County of San Diego
Board of Supervisors,
1600 Pacific Highway,
San Diego, California.

Att'n - Mr. Dave Bird.

Dear Sir:-

On Sept. 29th, 1958 I spoke to you over the telephone regarding a matter which I feel to be of great importance and one which should be brought before the Board for consideration. The subject matter being the type of vehicle permitted to use our public Highways for the purpose of transporting industrial waste, particularly waste acids. I feel that there is a great necessity for a safety measure Ordinance governing this matter.

I am sure that you are aware of the amount of acids which are now being used by the various Aircraft Plants and the small By-Product Manufacturers connected with them. This volume will increase as time goes on. These acids deteriorate after a short time and must be disposed of by tank truck and transported over our Highways thru' congested areas and heavy traffic to a disposal point, mainly the cut and fill dump at Mission Beach. It is essential that a designated disposal place be furnished by the City or the County of San Diego. Also that there be a strict requirement inspection by the Department of Public Works as to the type of vehicle used to transport this material to the disposal point.

No conveyance should be permitted to make use of this facility for the disposal of acids without the proper identification of approval from the Board of Public Works.

Scientifically treated trailers are now available for the purpose of hauling acids. This type of equipment - always with the truck on which it is mounted - should be able to stand a very rigid inspection by a Department of the County, same being designated by the Board of Supervisors. I am certain that, unless some action is taken on this hazardous matter, a very serious accident is inevitable. Then it will be too late.

A great number of the smaller manufacturers and platers are disposing of waste acids by way of the sewer. I understand that permission is granted to such manufacturers by the Sewage Dept. This action, no doubt, has been taken because of the lack of proper facilities for disposal.

JAN 14 1959

cont'd - 2.

Being cognizant of the foregoing, the Omar Rendering Co. has now added a new service for San Diego County. Namely, the Omar Disposal Service. This service is comprised of a fleet of tank trucks which are properly equipped to render a safe and satisfactory disposal service of any type. Also, we stand ready for whatever inspection this Board may require.

It is no longer necessary for the manufacturers using acids to dispose of them by way of the sewer as there is now an established Disposal Service available should they care to make use of this service. The larger plants are now doing so.

Sincerely,

Omar Rendering Co.,


.....
Ira L. Evans, Manager

ILE/dae

Copies forwarded to:

Mr. D. A. O'Leary,
State of California
Water Pollution Control Board.

Mr. Isadore Nusbaum,
San Diego Dept. of Sanitation.

Mr. Jean L. Vincenz, Director,
Dept. of Public Works.



COUNTY OF SAN DIEGO

INTER-DEPARTMENTAL CORRESPONDENCE

DATE February 13, 1959

TO: J. B. Askew, M.D.
Director of Public Health

FROM: Roderick F. Bott
Public Health Engineer

SUBJECT: Attached Memorandum from the Board of Supervisors

The undersigned has reviewed the attached correspondence and feels that information should be furnished to you as follows in this connection:

Approximately eighteen months to two years ago, the writer participated in surveys with Mr. D. A. O'Leary, Executive Officer, Water Pollution Control Board, and Mr. Jack Kuhns, chemist for the City Sewer Department, for the purpose of establishing areas which could be used for industrial waste dump sites. Several suitable areas were selected after a survey of some ten or a dozen sites, and a report was prepared by Mr. Kuhns and submitted to the then director of utilities for the purpose of securing approval of one or more sites for disposal of industrial wastes, consisting of acids, metallic solutions, waste plating solutions, etc. No action was forthcoming on the initial report. A second such report was prepared by Mr. Kuhns, and it is understood that this report found its final resting place in the city manager's office.

Meanwhile and up to the present time, the city has been using the Mission Bay Sanitary Fill for disposal of industrial wastes which were of excessive strength and which could not be disposed of, by permit, into the city sewers (disposal into sewers is regulated by the Industrial Waste Ordinance).

At the present time, the city plans to establish a new sanitary fill operation in San Clemente Canyon. It is stated that this area is in close proximity to one of the areas which had been investigated and which had been approved for the disposal of industrial wastes by the previously mentioned survey team. Disposal of the industrial wastes in the contemplated fill area, it is stated, should not cause difficulty.

The writer feels, with the originator of the letter, that some control over transportation of such dangerous industrial wastes over public highways should be established. Such control should include inspection and licensing of vehicles used to transport materials which could, through spillage or leakage, affect the public health--either from a bacteriological standpoint or from a chemical standpoint. One method of securing such control might be the extension of the present control over septic tank pumping trucks to include trucks which dispose of industrial wastes. This would avoid the necessity of enactment of a completely new ordinance.

RODERICK F. BOTT
Public Health Engineer

RFB:MS
Attach.

FEB 18 1959

DR. JAMES K. CHRISTIE

DOCTOR OF CHIROPRACTIC
GENERAL PRACTICE
4103 PARK BLVD.
SAN DIEGO 3, CALIF.

CITY OF SAN DIEGO

CYPRESS 5-5436

August 3 1959.

AUG 4 10 22 AM 1959

SAN DIEGO, CALIFORNIA

Commandant Eleventh Naval District,
San Diego, Calif.

Dear Sir:-

I have been reading with interest the negotiations between the City of San Diego and the U.S. Navy relative to the lease on the Mira Mar property for a so called sanitary land reclamation project.

Having observed the City of San Diego operating several Sanitary fills, I would like to particularly point out some objectionable practices being conducted at the Mission Bay location. I have seen loads of dead animals being ground up by a tractor and powerful acids being disposed of at this Sanitary fill. The fill is not covered at all times and the access roads and surrounding area are littered with debris and dust.

I do not believe the U.S. Navy will permit this type of operation at Mira Mar. A land reclamation project of this type would be a valuable asset to the Navy for recreation purposes. However, I do feel that is the Navy's responsibility to see that this land fill is maintained and that obnoxious odors, dust and litter will be kept to a minimum.

Very truly yours,

J.K. Christie
J.K. CHRISTIE, D.C.

JKC/C

cc San Diego City Council
cc Dr. J.B. Askew
cc E.V. Roper-Sanitary Division

AUG - 6 1959

Manager

DOCUMENT NO. **596095**

FILED AUG 5 - 1959
OFFICE OF THE CITY CLERK
SAN DIEGO, CALIFORNIA

Interdepartmental Communication

To: Mr. Max Bookman, District Engineer
State Department of Water Resources
Los Angeles

Date: August 27, 1959

Subject: Report on
Industrial Waste
Disposal Site,
Omar Rendering Company
Otay Valley,
File No. 282.9 #10

From: San Diego Regional Water Pollution Control Board
3441 University Avenue, San Diego 4, California

This will acknowledge receipt of and thank you for 24 copies of subject report. I am certain that the Regional Board will regard this report as fulfilling its needs with regard to the Omar Rendering Company proposal very satisfactorily.

A copy of Resolution 59-R15, this Regional Board's action concerning the proposed disposal operation was mailed to your office yesterday. Upon further recommendation of the Department of Water Resources, the Board may find the site or a contiguous site suitable for Class I materials in addition to the other classes. The City of San Diego is anxious to terminate the Mission Bay sanitary fill operation within a matter of days, an action which will deprive the metropolitan area of its only presently operative Class I site. We would therefore appreciate receiving your further recommendations in the minimum time compatible with the necessary studies and your heavy workload.

Dennis A. O'Leary
Executive Officer

DOL:gst

NOTES FROM FORMER LANDFILL EMPLOYEE-MISSION BAY SITE

3 copies
plus
OK
ms
8/10/11

No program of monitoring what was brought into landfill.

Site received drums of unknown chemicals, printer's ink, etc, all the time. There are barrels of liquid all over the landfill. At times, there were so many barrels the bulldozers would get stuck in them. Also "semi" loads of liquids dumped throughout landfill.

If anything "suspicious" was brought in (suspicion of cyanide, etc) staff would investigate-but he felt only cyanide was the only material consistently stopped.

Site would receive white stuff in tanker trucks and also paint skimmings from Convair (latter, 2-3 times a day). Additionally, materials received from Consolidated Vultec.

Method of disposing of drums of chemicals was to dig ditches, below sea level, let them fill with water, push drums/barrels in, cover with trash (to keep blade from puncturing drums while compacting/covering refuse).

Trenches dug with clam shell equipped drag line and bulldozer.

Records of landfill were destroyed (thrown away) by Dick Shepard (former Chief of Disposal).

Depth of landfill, 20-30 feet below current grade at Sea World Drive. That road is on earth fill about five (5) feet above top cover of landfill.

Rohr used to bring in big tankers. Truck load after truck load of barrels.

If the bulldozers punctured any of the incoming drums the smell would be terrible from the material that got on the dozers. Generally, they didn't know what was in barrels.

The Navy dumped alot of stuff at the landfill: also, Convair; Rohr; Ryan and Solar.

Only City trucks went into Arizona Street Landfill, and no barrels at South Chollas. However, chemicals and barrels going into Mission Bay went into South Miramar, starting the day Mission Bay Landfill closed and the Miramar site opened.

Re: Mission Bay. Staff would spray trash with salt water to get better compaction.

Project started north of dyke, near Pacific Highway, off Anna Street.

At times, gases would come out of working landfill area.

They once had a fire that burned for two (2) weeks.

THIS DOCUMENT
FOUND IN CITY OF
SAN DIEGO FILES.
UNDATED,
UNSIGNED

(H)

STATE OF CALIFORNIA
SAN DIEGO REGIONAL WATER POLLUTION CONTROL BOARD

RESOLUTION 59-R15

A RESOLUTION PRESCRIBING REQUIREMENTS FOR THE DISCHARGE OF WASTES
BY THE OMAR RENDERING COMPANY
ON A SITE IN THE EAST $\frac{1}{2}$ OF THE NORTHEAST $\frac{1}{4}$
OF THE NORTHWEST $\frac{1}{4}$ SECTION 19, RANGE 1 WEST, TOWNSHIP 18 SOUTH
SBBM

WHEREAS, On May 5, 1959, Mr. William O'Donnell, owner of the Omar Rendering Company, did submit to this Regional Board a Report on Waste Discharge wherein is proposed:

(1) the transportation of industrial wastes originating in the San Diego metropolitan area to a disposal site located on Omar Rendering Company property in the Otay Valley area of San Diego County;

(2) the discharge of the following waste materials to ponds located within the disposal site:

<u>Waste material</u>	<u>Approximate annual quantity</u>
chromic acid solution 1 to 10% conc.	90,000 gal.
mineral acid solutions, including 20% nitric / 4% hydrofluoric 20 to 30% nitric 20% sulfuric / 4% hydrofluoric 20% hydrochloric / 1% phosphoric / 5% hydrofluoric other more dilute solutions of these acids	200,000 gal.
alkaline solution wastes	150,000 gal.
carbide lime wastes containing approximately 3 lb/gal. lime	600,000 gal.

(3) removal of the evaporated residue to an acceptable fill site; and

WHEREAS, This Regional Board has caused the following investigations with respect to the aforesaid proposed discharges to be made:

1. Field investigations of the proposed disposal site and downstream areas were made by the staff of the Board.

2. A special investigation of the geology and hydrology of the proposed disposal area and the hydrology of potentially affected areas of the Otay River Valley by the State Department of Water Resources for the purpose of classifying the site as a refuse and waste disposal area.

VOID

Order 20-06
1/26/20

3. Comments and recommendations of other known interested agencies were requested, to be submitted after receipt of the Department of Water Resources report developed from the above investigation; and

WHEREAS, The following communication with regard to the proposed waste disposal operation was received:

(a) Letter from the California Water and Telephone Company dated May 21, 1959; and

WHEREAS, Mr. Joseph Feeney and Mr. William O'Donnell did appear before this Board at this meeting and did notify the Board of the immediate need for waste discharge requirements for the proposed operation because of the imminent closing of the Mission Bay Sanitary Fill, the only Class I disposal area now in operation in metropolitan San Diego; and

WHEREAS, A representative of the State Department of Water Resources did appear before this Board at this meeting and did inform the Board that the abovementioned field investigation by said Department had been completed; and

WHEREAS, The findings, conclusions and recommendations of the report of said investigation were made available to the Board at this meeting; and

WHEREAS, On the basis of the foregoing, this Board finds that:

1. The proposed disposal site, located on Omar Rendering Company property is a rectangularly-shaped excavation 520 feet long and 100 feet wide, with the longitudinal axis orientated in an east-west direction.

2. Depth of the pit is about 15 feet. A dike has been constructed at the south side of the disposal site, utilizing material removed during excavation.

3. A second pit located on Omar Rendering Company property and situated just north of the above-described excavation is also part of the disposal area. It is about 100 feet long in an east-west direction, 50 feet wide and about five feet deep.

4. The proposed waste discharge site is tributary to and 75 to 100 feet in elevation above the floor of the Otay River Valley.

5. Ground waters of the Otay River Basin are beneficially used for irrigation, stock, domestic, municipal and industrial supply.

6. The most highly mineralized ground water in the portion of the Otay Valley studied occurs in Section 19. Mineral quality of ground waters both upstream and downstream are generally of better quality. Generally, the quality of the water does not meet the standards of the United States Public Health Service for drinking water; however, two miles downstream from the site, groundwater quality meets these standards. The quality of water based on criteria for irrigation use is "good to injurious" downstream of Section 19.

7. Results of laboratory analyses of permeability performed on six samples of material obtained from the floor of the disposal site by the Department of Water Resources indicate that the material comprising the floor of the excavated portions of the site is relatively impermeable.